Petr Stepanov

UI/UX designer. Frontend and desktop developer.

Ph.D. graduate in physics with 5+ years of expertise in the user interface (UI) and user experience (UX) design. Strong web application and desktop software development skills.

Summary of Qualifications

Work Experience

C++ Software Developer

Thomas Jefferson National Laboratory (JLab), Newport News, VA, USA.

Jul 2020 - Current

Software Developer · Postdoctoral Researcher

Catholic University of America (CUA), Washington, DC, USA.

Jul 2020 - Current

Software Developer • Research Assistant

Bowling Green State University (BGSU), Bowling Green, OH, USA.

Aug 2014 - May 2020

- Wrote three desktop GUI programs for spectra fitting and interpretation (C++, CMake, ROOT, Qt, Java)
- GitHub repositories contain over 10k lines of code in total: <u>TLIST Processor</u>, <u>SW Calculator</u>, <u>RooPositron</u>.
- Extended default ROOT GUI library (Qt-based) to support the MVP design pattern.

UI/UX Designer, Frontend Developer • Freelance

Sep 2012 - May 2020

- Designed and built an online e-commerce store <u>Sticker Store LLC</u> with a static website generator (Figma, Hexo, Snipcart, Bootstrap, SASS, Express.JS, EJS, Node.js).
- Improved the Google PageSpeed Insights metrics (CLS, LCP) up to 97%.
- · Created a recursive script to export over 300 products from YAML file to Google Merchant.
- Optimized SEO. The project reached over 1400 organic monthly users.
- Made iOS application (Swift, Ulkit, storyboards) for the <u>We.Team</u> messenger (more than 3k monthly downloads in AppStore). Participated in cloud-based messenger development with enhanced file sharing capabilities (HTML, React JS, SASS).
- Migrated the landing page for <u>Sweetbridge</u> company from WordPress to Jekyll static site generator (Ruby, CSS). This resulted in a 70% improvement in the page load time.
- Developed the front-end part (Angular, js, HTML, LESS) for Lili Social network.
- · Assisted with iOS mobile application (Ionic).
- Enabled SEO crawling of over 1000 Angular is pages with Google bot.
- Web design.
- Designed logos, UI/UX prototypes (Figma, Sketch, Illustrator) and branding identity for over 10 different companies.
- Converted numerous design assets and mockups into responsive HTML and CSS.
- Mocked up and integrated dozens of cross-browser responsive email templates.

Web Designer, Full Stack Web Developer

Gridnine Systems, Moscow, Russia.

Apr 2011 - Aug 2014

- Prototyped and designed interactive mockups for <u>Otixo</u> cloud file integrator (Balsamiq, Adobe Creative Suite). Utilized Google Web Toolkit (GWT) Model-View-Presenter (MVP) framework to develop application frontend (JavaScript, responsive CSS).
- Responsible for the front-end development of the <u>ATH American Express</u> the largest travel management company in Russia (JavaScript, Backbone.js, and RequireJS). Increased the front-end load time by over 30%.
- Implemented image processing servlets on the backend to generate banners for five different social networks (PHP, ImageMagic).
- Wireframed and sliced to web pages numerous UI/UX mockups for web applications (Balsamiq, Photoshop, HTML and CSS).

Computer Science Teacher

Phys-Tech College at MIPT, Moscow, Russia.

Oct 2009 - May 2011

 Provided instructions and guidance to high school students on following computer courses: C/C++ programming, HTML, Adobe Photoshop and 3D Studio Max.

Research Scientist

Institute for Theoretical and Experimental Physics (ITEP), Moscow, Russia.

Sep 2008 - Apr 2011

 Application of positron lifetime spectroscopy for studying the radioactive-induced defects in steels. Monte-Carlo particle simulations with Fortran 95. Maintaining software for CAMECA tomographic atom probe (MSVC). Application of CERN ROOT libraries for fitting and analysis of experimental spectra.

Computer Science Skills

- Essentials. Git, SVN, SSH, Linux, and Terminal usage. BASH scripting. IDEs: Eclipse, Xcode, Visual Studio Code (VS Code).
- Project management. JIRA, Trello, GitHub, GitLab.
- Desktop app development. C/C++, GNU make, CMake. Frameworks: Qt, CERN ROOT, Geant4. Java and Swing. Python.
- **Frontend**: HTML, CSS (LESS and SASS), Bootstrap, responsive web design, JavaScript and jQuery, npm, gulp, AngularJS, React.js. Google Web Toolkit. PHP and WordPress themes development.
- Backend. Node.js, Express.JS (EJS), Java.
- UI/UX design. Figma, Sketch, InVision Studio, Adobe XD, Adobe Photoshop, Adobe Illustrator, Inkscape, Balsamiq, Blender.
- Apple iOS. Fundamental Swift skills. User interface development with Ulkit and storyboards.

Education

Bowling Green State University (BGSU) • Ohio, USA

Aug 2014 - May 2020

Ph.D. in Photochemical Sciences • GPA 3.423. Novel developments in positron annihilation spectroscopy techniques—from experimental setups to advanced processing software. <u>View manuscript</u>.

British Higher School of Art and Design (BHSAD) • Moscow, Russia

Dec 2011 - Feb 2012

Three-month intensive in Graphical Design and Visual Communications. Lectures and hands-on experience in graphic design and user interfaces.

Professional Networks

- Find examples of my code on GitHub (50+ repositories).
- Discover my professional contacts on LinkedIn (200+ connections).
- Check out my UI design portfolio on Dribbble (50+ shots).

Interests

- Hosting an open-source project for keyboard remapping on Linux 300+ stars on GitHub.
- Contributing to the C++ open source framework ROOT. Created two shared libraries to facilitate data analysis. Links to GitHub: CanvasHelper and RootUtils.